

Babesiosis

What is babesiosis?

Babesiosis is a disease caused by a very small (microscopic) parasite that infects red blood cells.

Who gets babesiosis?

In the United States, most cases of babesiosis occur in the Northeast (New York, Massachusetts, Connecticut, and Rhode Island) and the upper Midwest (Wisconsin and Minnesota). A small number of cases have been reported in other states. Most of these cases have been associated with travel to states where babesiosis is common.

How is babesiosis spread?

The parasite is spread by the bite of blacklegged or deer ticks (belonging to the genus *Ixodes*). Young ticks (nymphs), which are the size of a poppy seed, are the main transmitters of the parasite to humans. The infected tick usually has to be attached to a person for 24 to 36 hours before it can spread the parasite. Because the parasite is present within red blood cells, it can also be spread by blood transfusions. Most cases occur in the spring and early summer when young ticks are actively feeding.

What are the symptoms of babesiosis?

Many people who are infected do not have any symptoms or they might have mild, flu-like illness characterized by fever, chills, headache, muscle or body aches, fatigue, nausea, vomiting, abdominal pain, and dark urine. Older persons, those without a spleen, and those with weakened immune systems are more likely to develop severe or potentially life-threatening complications.

How soon after exposure do symptoms appear?

Symptoms, if present, may appear anywhere from several weeks to several months after exposure, but usually appear within one to three weeks after exposure.

How is babesiosis diagnosed?

Babesiosis is diagnosed by examination of blood under a microscope. Several blood specimens may need to be examined to detect low levels of the parasite.

What is the treatment for babesiosis?

Doctors usually prescribe multiple drugs to treat people who are ill with babesiosis.

How can babesiosis be prevented?

The best way to reduce the risk for babesiosis and other tickborne infections is to avoid tick habitats, such as tall grass and vegetation in shaded areas, forests, and along forest edges. If you do spend time outdoors in tick habitats, including your backyard, take precautions to keep ticks off the skin. Walk on cleared trails, and stay in the center of the trail to avoid brushing against vegetation. Wear light-colored clothing so that ticks are easier to see and remove. Minimize the amount of exposed skin by wearing a long-sleeved shirt and long pants and tucking the pant legs into socks and boots. Apply tick repellent with DEET (N,N-diethyl-meta-toluamide) on your skin or clothing or permethrin on your clothing. Always follow the instructions on the product label. Conduct tick checks on yourself, your children, and your pets after spending time in an area likely to have ticks.

How do I perform a tick check?

After being outdoors, even in your own yard, search your entire body for ticks. The young deer ticks (nymphs) are about the size of a poppy seed. The adult deer ticks are about the size of a sesame seed. Both ticks can spread the disease, but nymphs are the main transmitters. When checking your body, remember that ticks like places that are warm and moist. Be sure to check the armpits, groin, scalp, in and around the ears, and around the waist. Remember to check yourself, your children, and your pets for ticks. See <http://www.cdc.gov/features/lymedisease/> for more information about performing tick checks.

What should I do if I find a tick attached to the skin?

Remove the tick as soon as it is found by grabbing the tick with pointed (fine-tipped) tweezers as close to the skin as possible and pulling the tick straight out by applying steady outward pressure. Call your health care provider if there are concerns about incomplete tick removal. After removing the tick, thoroughly wash the wound site and your hands. If the tick has been attached for less than 24-36 hours, the risk of getting babesiosis is minimal.

How can I protect my pet from tickborne diseases?

You can protect your family pets from getting a tickborne disease and prevent them from bringing ticks into the home by applying tick medicine or using a tick collar. Ask your veterinarian about prevention options and always follow the directions on the product label. For more information on animals and health, see the Centers for Disease Control and Prevention Healthy Pets, Healthy People website at <http://www.cdc.gov/healthypets/>.

How can I get more information about babesiosis?

- 1) If you have concerns about disease, contact your healthcare provider.
- 2) Call your local health department. A directory of local health departments is located at <http://www.vdh.virginia.gov/LHD/index.htm>.
- 3) Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/parasites/babesiosis/>.